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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/824,301	04/14/2004	John Gentile	TINK 3.0-023	5974
530 7590 12/21/2007 LERNER, DAVID, LITTENBERG, KRUMHOLZ & MENTLIK 600 SOUTH AVENUE WEST WESTFIELD, NJ 07090			EXAMINER DEBERADINIS, ROBERT L	
			ART UNIT 2836	PAPER NUMBER
			MAIL DATE 12/21/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/824,301	Applicant(s) GENTILE ET AL.	
	Examiner Robert DeBeradinis	Art Unit 2836	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 October 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 33-48 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 33-48 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 October 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/12/07 has been entered.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 33-35,39,42-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over KAISERMAN 5,973,420.

### CLAIM 33

KAISERMAN discloses an electrical system includes a circuit element responsive to applied current, a power source for providing current to the circuit element, a substrate, and a substantially clear conductive composition arranged on or in association with the substrate for providing an electrical current path between the power source and the responsive current element (abstract) KAISERMAN also teaches colored conductive composition wherein when a conductive object makes first contact with the colored conductor the electrical circuit is completed (col. 11 lines 58 plus).

KAISERMAN does not teach wherein a substantially non-conductive composition arranged on the substrate and having a first color; a substantially conductive composition having a second color that matches the first color, the conductive composition being arranged on the non-conductive composition and forming an open circuit area thereon.

It would have been obvious to one having ordinary skill in the art at the time of this invention to have modified the electrical system having the clear conductive composition to a system having colored conductive composition that matches the color of the of the substrate providing an electrical circuit on the surface of the substrate that would not be visible but would provide a circuit that would trigger under a specific controlled condition (col. 12, lines 15-25).

### CLAIMS 34,35,40,45

KAISERMAN discloses the electronic product of claim 33 wherein the product depicts a guitar on a T-shirt and when a string (colored conductive composition) of the guitar is touched with a conductive device a sound is generated, The dimensions of the conductive and non-conductive composition is not disclosed and is obviously dependent on the design of the illustration. It would be obvious to dimension the conductive and the nonconductive compositions to any desired dimension to illustrate a desired figure.

CLAIMS 39,43,44,46

KAISERMAN discloses an electronic product comprising: a substrate; a non-conductive composition arranged on the substrate; a conductive composition arranged on a portion of the non-conductive composition, the conductive composition being clear and forming a gap through which the non-conductive composition is visible; a circuit module connected to the conductive composition; and a battery electrically connected to the conductive composition and the circuit module whereby the circuit module is operable when a closed circuit condition is caused by placing a conductive object across the gap of the conductive composition.

KAISERMAN also discloses the conductive composition may be clear, colored or opaque (col.11, lines 10-57).

KAISERMAN does not disclose the conductive and non-conductive compositions having substantially the same color so that the combination of the two compositions appear to be continuous across the gap.

It would have been obvious to one having ordinary skill in the art to have modified the placemat and to have used a colored conductive composition having the same color as the substrate in place of the clear conductive composition to achieve a conductive circuit that would not be visible and still provide details for the illustrated figure. KAISERMAN also implies that there is an advantage for using a clear conductive composition when detail is not illustrated, it is easier to apply, you just have to spray the clear conductive composition on and the imperfections are not visible.

#### CLAIM 42

KAISERMAN discloses the electronic product of claim 39 wherein conductive and non-conductive compositions are used to form the electronic product. KAISERMAN does not disclose the specific resistance of the non-conductive composition. It would have been obvious to one having ordinary skill in the art to use a composition with a high resistance, it is obvious that the resistance is high enough so that the circuit is operational, also the applicant does not claim that the 100 M ohm range for the resistance provides an advantage over a lower resistance composition. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to use 100 m ohm non-conductive composition, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 UAPQ 215 (CCPA 1980).

#### CLAIM 47

KAISERMAN discloses the electronic product of claim 46 wherein the electronic circuit element comprises a light emitting diode (16).

#### CLAIM 48

KAISERMAN discloses the electronic product of claim 46 wherein the electronic circuit element comprises a sound module (56).

Claims 36,41 are rejected under 35 U.S.C. 103(a) as being unpatentable over KAISERMAN 5,973,420 in view of FERBER 5,567,037.

#### CLAIMS 36,41

KAISERMAN discloses the electronic product of claim 33.

KAISERMAN does not teach wherein the conductive and non-conductive compositions comprise ink.

FERBER teaches conductive current paths can be made with conductive ink (abstract) and it is well known that non-conductive ink is used to draw figures.

It would have been obvious to use conductive and non-conductive ink to form a figure on a substrate. The motivation would be to generate a figure having an electrical function.

Claim 37,38 are rejected under 35 U.S.C. 103(a) as being unpatentable over KAISERMAN 5,973,420 in view of FERBER 5,626,948.

#### CLAIMS 37,38

KAISERMAN discloses the electronic product of claim 33 wherein a conductive composition competes an electrical circuit. KAISERMAN is silent as to the composition of the conductive composition.

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FERBER 5,626,948 discloses silver and carbon is used to form conductive materials (col. 7, lines 23-35)

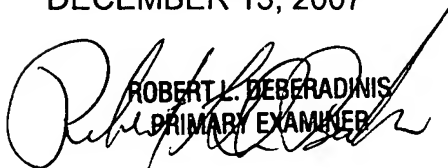
It is obvious that silver and carbon could be part of the conductive composition used in the disclosed electrical product.

Any inquiry concerning this communication should be directed to Robert L. DeBeradinis whose number is (571) 272-2049. The Examiner can normally be reached Monday-Friday from 8:30 am to 5:00 pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Michael Sherry, can be reached on (571) 272-2058. The Fax phone number for this Group is (571) 272-8300.

RLD

DECEMBER 13, 2007

  
ROBERT L. DEBERADINIS  
PRIMARY EXAMINER